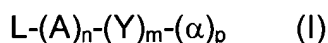**WHAT IS CLAIMED IS:**

1.   A cosmetic composition comprising:

- at least one compound (a); and

- at least one complexing agent (b) capable of forming a complex, having a dissociation constant of less than or equal to 0.1 at a temperature of 25°C, with the at least one compound (a), wherein the at least one compound (a) is chosen from compounds of formula (I):
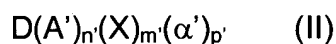
$$L\text{-}(A)_n\text{-}(Y)_m\text{-}(\alpha)_p \qquad (I)$$

wherein:

- m is a number ranging from 0 to 100;

- n is equal to 0 or 1;

- p is a number ranging from 0 to 100;

- α is chosen from anchoring groups allowing covalent attachment to a keratin material;

- L is chosen from residues having complexing activity relative to the at least one complexing agent (b), provided that L is not biotin;

- A is chosen from linear and branched, saturated and unsaturated divalent radicals comprising from 1 to 100 carbon atoms, optionally interrupted with at least one hetero atom and optionally substituted with at least one group chosen from hydroxyl, amino, halogen, aryl, phosphate, phosphonate, sulphate, sulphonate, carboxyl, alkoxycarbonyl and alkoxy groups;

- Y is chosen from groups Z, wherein Z is chosen from carboxyl, mercaptan, alkoxycarbonyl, amino, ammonio, phosphite, phosphate, phosphonate, sulphate

sulphite, and sulphonate and from radicals BW, wherein W is chosen from residues with cosmetic activity and B is chosen from species for fixing the residue W to L or to A;

- B is chosen from amine, imine, amide, ester, disulphide, thioester, urethane, urea, ether, thioether, azo, methine and epoxy groups, aromatic and heterocyclic residues and dialkylpolysiloxane residues; and

- W is derived from at least one of UV-screening molecules, hydrating and emollient molecules, conditioners, antistatic agents, antiperspirants, fragrancing materials, reducing molecules, oxidizing molecules, coloring molecules, antimicrobial agents, antidandruff agents, mineral and organic particulates onto which are optionally adsorbed at least one polymer, and anionic, nonionic, amphoteric and cationic film-forming agents onto which are optionally adsorbed organic and/or mineral particles.

2. The composition according to Claim 1, wherein the at least one complexing agent (b) is chosen from compounds of formula (II):

$$D(A')_{n'}(X)_{m'}(\alpha')_{p'} \qquad (II)$$

wherein:

- α' is chosen from anchoring groups allowing covalent attachment to a keratin material;

- X is chosen from groups Z' and radicals CW';

- Z' is chosen from carboxyl, mercaptan, alkoxycarbonyl, amino, ammonio, phosphite, phosphate, phosphonate, sulphate sulphite, and sulphonate radicals;

- m' is a number ranging from 0 to 100;

- n' is equal to 0 or 1;

- p' is a number ranging from 0 to 100;

- A' is chosen from linear and branched, saturated and unsaturated divalent radicals comprising from 1 to 100 carbon atoms, optionally interrupted with at least one hetero atom and optionally substituted with at least one group chosen from hydroxyl, amino, halogen, aryl, phosphate, phosphonate, sulphate, sulphonate, carboxyl, alkoxycarbonyl and alkoxy groups;

- W' is derived from at least one of UV-screening molecules, hydrating and emollient molecules, conditioners, antistatic agents, antiperspirants, fragrancing materials, reducing molecules, oxidizing molecules, coloring molecules, antimicrobial agents, antidandruff agents, mineral and organic particulates onto which are optionally adsorbed at least one polymer, and anionic, nonionic, amphoteric and cationic film-forming agents onto which are optionally adsorbed organic and/or mineral particles;

- C is chosen from moieties for attaching the residue W to the active complexing component D; and

- D is such that the combination $D(A')_{n'}(X)_{m'}(\alpha')_{p'}$ can form with the at least one compound (a) a complex whose dissociation constant is less than 0.1 at a temperature of 25°C.

3. The cosmetic composition according to Claim 1, wherein, in the at least one compound (a), the anchoring group α is chosen from: thiosulphates; aldehydes; epoxides; alkoxysilane; silanol; aziridine; acetal; hemiacetal; aminal; hemiaminal; oxazine and oxazoline; oxazinium and oxazolinium; vinyl and activated vinyl; acrylonitrile, acrylic and methacrylic esters, crotonic acid and esters, cinnamic acids and esters, styrene and derivatives thereof, butadiene, vinyl ethers, vinylacetone, maleic esters, vinyl sulphones, maleimides; ketones and α-hydroxy ketones, α-halo ketones; alkyl, aryl and arylalkyl

halides RX, wherein X is chosen from I, Br and Cl atoms and OSO_3H, $N(Me)_3$, SO_2Me, OPO_3H, and SO_2Et groups; halides RX of unsaturated rings chosen from carbon-based rings and heterocycles, wherein X is chosen from Cl, OSO_3H, $N(Me)_3$, SO_2Me, OPO_3H, and SO_2Et groups; sulphonyl halides RSO_2X, wherein X is chosen from Cl and F atoms and OSO_3H, $N(Me)_3$, SO_2Me, OPO_3H, and SO_2Et groups; para-nitrophenyl esters; pentafluorophenyl ester siloxane; halogenosilanes; halogenoacetates; hydrazines; acids; difluorodinitrobenzene; N-hydroxysuccinimide esters; pyridyldithio; nitrobenzyldithio; imidate; phenyl anhydrides or azide, benzophenone, acid halides, lactones and thiolactones, isocyanate and isothiocyanate; diazoalkanes and thiols.
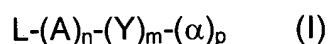
4. The cosmetic composition according to Claim 3, wherein the heterocycles RX are chosen from chlorotriazine, chloropyrimidine, chloroquinoxaline, and chlorobenzotriazole.

5. The cosmetic composition according to Claim 2, wherein, in the at least one complexing agent (b), the anchoring group α' is chosen from: thiosulphates; aldehydes; epoxides; alkoxysilane; silanol; aziridine; acetal; hemiacetal; aminal; hemiaminal; oxazine and oxazoline; oxazinium and oxazolinium; vinyl and activated vinyl; acrylonitrile, acrylic and methacrylic esters, crotonic acid and esters, cinnamic acids and esters, styrene and derivatives thereof, butadiene, vinyl ethers, vinylacetone, maleic esters, vinyl sulphones, maleimides; ketones and α-hydroxy ketones, α-halo ketones; alkyl, aryl and arylalkyl halides RX, wherein X is chosen from I, Br and Cl atoms and OSO_3H, $N(Me)_3$, SO_2Me, OPO_3H, and SO_2Et groups; halides RX of unsaturated rings chosen from carbon-based rings and heterocycles, wherein X is chosen from Cl and OSO_3H, $N(Me)_3$, SO_2Me, OPO_3H, and SO_2Et groups; sulphonyl halides RSO_2X, wherein X is chosen from Cl and F atoms and OSO_3H, $N(Me)_3$, SO_2Me, OPO_3H, and SO_2Et groups; para-nitrophenyl esters;

pentafluorophenyl ester siloxane; halogenosilanes; halogenoacetates; hydrazines; acids; difluorodinitrobenzene; N-hydroxysuccinimide esters; pyridyldithio; nitrobenzyldithio, imidate; phenyl anhydrides or azide, benzophenone, acid halides, lactones and thiolactones, isocyanate and isothiocyanate; diazoalkanes and thiols.

6. The cosmetic composition according to Claim 5, wherein the heterocycles RX are chosen from chlorotriazine, chloropyrimidine, chloroquinoxaline, and chlorobenzotriazole.

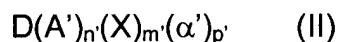7. A composition comprising at least one compound (a) chosen from compounds of formula (I):

$$L\text{-}(A)_n\text{-}(Y)_m\text{-}(\alpha)_p \qquad (I)$$

wherein:

- m is a number ranging from 0 to 100;

- n is equal to 0 or 1;

- p is a number ranging from 0 to 100;

- α is chosen from anchoring groups allowing covalent attachment to a keratin material;

- L is chosen from residues having complexing activity relative to the at least one complexing agent (b), provided that L is not biotin;

- A is chosen from linear and branched, saturated and unsaturated divalent radicals comprising from 1 to 100 carbon atoms, optionally interrupted with at least one hetero atom and optionally substituted with at least one group chosen from hydroxyl, amino, halogen, aryl, phosphate, phosphonate, sulphate, sulphonate, carboxyl, alkoxycarbonyl and alkoxy groups;

- Y is chosen from groups Z, wherein Z is chosen from carboxyl, mercaptan, alkoxycarbonyl, amino, ammonio, phosphite, phosphate, phosphonate, sulphate sulphite, and sulphonate and radicals BW, wherein W is chosen from residues with cosmetic activity and B is chosen from species for fixing the residue W to L or to A;

- B is chosen from amine, imine, amide, ester, disulphide, thioester, urethane, urea, ether, thioether, azo, methine and epoxy groups, aromatic and heterocyclic residues and dialkylpolysiloxane residues; and

- W is derived from at least one of UV-screening molecules, hydrating and emollient molecules, conditioners, antistatic agents, antiperspirants, fragrancing materials, reducing molecules, oxidizing molecules, coloring molecules, antimicrobial agents, antidandruff agents, mineral and organic particulates onto which are optionally adsorbed at least one polymer, and anionic and nonionic, amphoteric and cationic film-forming agents onto which are optionally adsorbed organic and/or mineral particles.

8. A composition comprising at least one complexing compound (b) chosen from compounds of formula (II):

$$D(A')_{n'}(X)_{m'}(\alpha')_{p'} \qquad (II)$$

wherein:

- α' is chosen from anchoring groups allowing covalent attachment to a keratin material;

- X is chosen from groups Z' and radicals CW';

- Z' is chosen from carboxyl, mercaptan, alkoxycarbonyl, amino, ammonio, phosphite, phosphate, phosphonate, sulphate sulphite, and sulphonate radicals;

- m' is a number ranging from 0 to 100;

- n' is equal to 0 or 1;

- p' is a number ranging from 0 to 100;

- A' is chosen from linear and branched, saturated and unsaturated divalent radicals comprising from 1 to 100 carbon atoms, optionally interrupted with at least one hetero atom and optionally substituted with at least one group chosen from hydroxyl, amino, halogen, aryl, phosphate, phosphonate, sulphate, sulphonate, carboxyl, alkoxycarbonyl and alkoxy groups;

- C is chosen from moieties for attaching the residue W to the active complexing component D; and

- D is such that the combination $D(A')_{n'}(X)_{m'}(\alpha')_{p'}$ can form with the at least one compound (a) a complex whose dissociation constant is less than 0.1 at a temperature of 25°C.

9. The composition according to Claim 1, wherein the at least one compound (a) and the at least one complexing agent (b) are, respectively, derived from an antigen and an antibody.

10. The composition according to Claim 1, wherein the at least one compound (a) and the at least one complexing agent (b) are derived, respectively, from carbohydrate and lectin.

11. The composition according to Claim 1, wherein the at least one compound (a) and the at least one complexing agent b) are derived, respectively, from a substrate and an enzyme.

12. The composition according to Claim 1, wherein the at least one compound (a) and the at least one complexing agent (b) are present in the composition in a combined
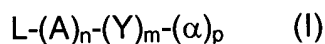
amount ranging from 0.000001% to 90% by weight, relative to the total weight of the composition.

13.   The composition according to Claim 12, wherein the at least one compound (a) and the at least one complexing agent (b) are present in the composition in a combined amount ranging from 0.000005% to 50% by weight, relative to the total weight of the composition.

14.   The composition according to Claim 13, wherein the at least compound (a) and the at least one complexing agent (b) are present in the composition in a combined amount ranging from 0.00001% to 20% by weight, relative to the total weight of the composition.

15.   The composition according to Claim 1, wherein the composition is provided in a form chosen from at least partially thickened aqueous, alcoholic and aqueous-alcoholic solutions, creams, fluid gels, sticks, mousses, and optionally packaged in aerosol forms.
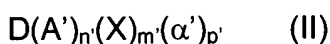
16.   A process for treating a keratin material comprising:

- depositing on to the keratin material at least one compound (a) chosen from compounds of formula (I):

$$L\text{-}(A)_n\text{-}(Y)_m\text{-}(\alpha)_p \qquad (I)$$

- m is a number ranging from 0 to 100;

- n is equal to 0 or 1;

- p is a number ranging from 0 to 100;

- α is chosen from anchoring groups allowing covalent attachment to a keratin material;

- L is chosen from residues having complexing activity relative to the at least one complexing agent (b), provided that L is not biotin;

- A is chosen from linear and branched, saturated and unsaturated divalent radicals comprising from 1 to 100 carbon atoms, optionally interrupted with at least one hetero atom and optionally substituted with at least one group chosen from hydroxyl, amino, halogen, aryl, phosphate, phosphonate, sulphate, sulphonate, carboxyl, alkoxycarbonyl and alkoxy groups;

- Y is chosen from groups Z, wherein Z is chosen from carboxyl, mercaptan, alkoxycarbonyl, amino, ammonio, phosphite, phosphate, phosphonate, sulphate sulphite, and sulphonate and radicals BW, wherein W is chosen from residues with cosmetic activity and B is chosen from species for fixing the residue W to L or to A;

- B is chosen from amine, imine, amide, ester, disulphide, thioester, urethane, urea, ether, thioether, azo, methine and epoxy groups, aromatic and heterocyclic residues and dialkylpolysiloxane residues; and

- W is derived from at least one of UV-screening molecules, hydrating and emollient molecules, conditioners, antistatic agents, antiperspirants, fragrancing materials, reducing molecules, oxidizing molecules, coloring molecules, antimicrobial agents, antidandruff agents, mineral and organic particulates onto which are optionally adsorbed at least one polymer, and anionic and nonionic, amphoteric and cationic film-forming agents onto which are optionally adsorbed organic and/or mineral particles; and

- applying to the keratin material at least one complexing agent (b) chosen from compounds of formula (II):

$$D(A')_{n'}(X)_{m'}(\alpha')_{p'} \qquad (II)$$

wherein:

- α' is chosen from anchoring groups allowing covalent attachment to a keratin material;

- X is chosen from groups Z' and radicals CW';

- Z' is chosen from carboxyl, mercaptan, alkoxycarbonyl, amino, ammonio, phosphite, phosphate, phosphonate, sulphate sulphite, and sulphonate radicals;

- m' is a number ranging from 0 to 100;

- n' is equal to 0 or 1;

- p' is a number ranging from 0 to 100;

- A' is chosen from linear and branched, saturated and unsaturated divalent radicals comprising from 1 to 100 carbon atoms, optionally interrupted with at least one hetero atom and optionally substituted with at least one group chosen from hydroxyl, amino, halogen, aryl, phosphate, phosphonate, sulphate, sulphonate, carboxyl, alkoxycarbonyl and alkoxy groups;

- W' is derived from at least one of UV-screening molecules, hydrating and emollient molecules, conditioners, antistatic agents, antiperspirants, fragrancing materials, reducing molecules, oxidizing molecules, coloring molecules, antimicrobial agents, antidandruff agents, mineral and organic particulates onto which are optionally adsorbed at least one polymer, and anionic and nonionic, amphoteric and cationic film-forming agents onto which are optionally adsorbed organic and/or mineral particles;

- C is chosen from moieties for attaching the residue W to the active complexing component D; and

- D is such that the combination $D(A')_{n'}(X)_{m'}(\alpha')_{p'}$ can form with the at least one compound (a) a complex whose dissociation constant is less than 0.1 at a temperature of 25°C.

17. The process according to Claim 16, wherein the keratin material is hair.

18. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one compound (a) wherein p=0 and Y is chosen from groups Z, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein p'=0 and X is chosen from groups Z'.

19. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one compound (a) wherein p=0 and Y is chosen from radicals BW, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein p'=0 and X is chosen from groups Z'.

20. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one compound (a) wherein p=0 and Y is chosen from groups Z, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein p'=0 and X is chosen from radicals CW'.

21. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one compound (a) wherein p=0 and Y is chosen from radicals BW, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein p'=0 and X is chosen from radicals CW'.

22.   The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one complexing agent (b) wherein p'=0 and X is chosen from groups Z', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein p=0 and Y is chosen from groups Z.

23.   The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one complexing agent (b) wherein p'=0 and X is chosen from groups Z', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein p=0 and Y is chosen from radicals BW.

24.   The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one complexing agent (b) wherein p'=0 and X is chosen from radicals CW', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein p=0 and Y is chosen from groups Z.

25.   The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one complexing agent (b) wherein p'=0 and X is chosen from radicals CW', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein p=0 and Y is chosen from radicals BW.

26.   The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one compound (a) wherein p=0 and Y is chosen from groups Z, and then, in a second stage,

applying to the keratin material the at least one complexing agent (b) wherein $p' \neq 0$ and X is chosen from groups Z'.

27. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one compound (a) wherein $p=0$ and Y is chosen from radicals BW, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein $p' \neq 0$ and X is chosen from groups Z'.

28. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one compound (a) wherein $p=0$ and Y is chosen from groups Z, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein $p' \neq 0$ and X is chosen from radicals CW'.

29. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one compound (a) wherein $p=0$ and Y is chosen from radicals BW, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein $p' \neq 0$ and X is chosen from radicals CW'.

30. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one complexing agent (b) wherein $p'=0$ and X is chosen from groups Z', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein $p \neq 0$ and Y is chosen from groups Z.

31. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one

complexing agent (b) wherein p'=0 and X is chosen from groups Z', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein p≠0 and Y is chosen from radicals BW.

32. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one complexing agent (b) wherein p'=0 and X is chosen from radicals CW', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein p≠0 and Y is chosen from groups Z.

33. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by adsorption the at least one complexing agent (b) wherein p'=0 and X is chosen from radicals CW', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein p≠0 and Y is chosen from radicals BW.

34. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one compound (a) wherein p≠0 and Y is chosen from groups Z, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein p'=0 and X is chosen from groups Z'.

35. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one compound (a) wherein p≠0 and Y is chosen from radicals BW, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein p'=0 and X is chosen from groups Z'.

36. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one compound (a) wherein $p \neq 0$ and Y is chosen from groups Z, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein $p'=0$ and X is chosen from radicals CW'.

37. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one compound (a) wherein $p \neq 0$ and Y is chosen from radicals BW, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein $p'=0$ and X is chosen from radicals CW'.

38. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one complexing agent (b) wherein $p' \neq 0$ and X is chosen from groups Z', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein $p=0$ and Y is chosen from groups Z.

39. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one complexing agent (b) wherein $p' \neq 0$ and X is chosen from groups Z', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein $p=0$ and Y is chosen from radicals BW.

40. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one complexing agent (b) wherein $p' \neq 0$ and X is chosen from radicals CW', and then, in a

second stage, applying to the keratin material the at least one compound (a) wherein p=0 and Y is chosen from groups Z.

41.   The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one complexing agent (b) wherein p'≠0 and X is chosen from radicals CW', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein p=0 and Y is chosen from radicals BW.

42.   The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one compound (a) wherein p≠0 and Y is chosen from groups Z, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein p'≠0 and X is chosen from groups Z'.

43.   The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one compound (a) wherein p≠0 and Y is chosen from radicals BW, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein p'≠0 and X is chosen from groups Z'.

44.   The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one compound (a) wherein p≠0 and Y is chosen from groups Z, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein p'≠0 and X is chosen from radicals CW'.

45. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one compound (a) wherein $p \neq 0$ and Y is chosen from radicals BW, and then, in a second stage, applying to the keratin material the at least one complexing agent (b) wherein $p' \neq 0$ and X is chosen from radicals CW'.

46. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one complexing agent (b) wherein $p' \neq 0$ and X is chosen from groups Z', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein $p \neq 0$ and Y is chosen from groups Z.

47. The process for treating a keratin material according to Claim 16, comprising, in a first stage, in depositing onto the keratin material by covalent attachment the at least one complexing agent b) wherein $p' \neq 0$ and X is chosen from groups Z', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein $p \neq 0$ and Y is chosen from radicals BW.

48. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one complexing agent (b) wherein $p' \neq 0$ and X is chosen from radicals CW', and then, in a second stage, applying to the keratin material the at least one compound (a) wherein $p \neq 0$ and Y is chosen from groups Z.

49. The process for treating a keratin material according to Claim 16, comprising, in a first stage, depositing onto the keratin material by covalent attachment the at least one complexing agent (b) wherein $p' \neq 0$ and X is chosen from radicals CW', and then, in a

second stage, applying to the keratin material the at least one compound (a) wherein $p \neq 0$ and Y is chosen from radicals BW.

50. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material by absorption the at least one compound (a) wherein p=0 and Y is chosen from groups Z and the at complexing agent (b) wherein p'=0 and X is chosen from groups Z'.

51. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material by absorption the at least one compound (a) wherein p=0 and Y is chosen from groups BW and the at least one complexing agent (b) wherein p'=0 and X is chosen from groups Z'.

52. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material by absorption the at least one compound (a) wherein p=0 and Y is chosen from groups Z and the at least one complexing agent (b) wherein p'=0 and X is chosen from radicals CW'.

53. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material by absorption the at least one compound (a) wherein p=0 and Y is chosen from radicals BW and the at least one complexing agent (b) wherein p'=0 and X is chosen from radicals CW'.

54. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material the at least one compound (a) wherein p=0 and Y is chosen from groups Z and the at least one complexing agent (b) wherein $p' \neq 0$ and X is chosen from groups Z'.

55. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material the at least one compound (a) wherein

$p=0$ and Y is chosen from radicals BW and the at least one complexing agent (b) wherein $p'\neq0$ and X is chosen from groups Z'.

56. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material the at least one compound (a) wherein $p=0$ and Y is chosen from groups Z and the at least one complexing agent (b) wherein $p'\neq0$ and X is chosen from radicals CW'.

57. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material the at least one compound (a) wherein $p=0$ and Y is chosen from radicals BW and the at least one complexing agent (b) wherein $p'\neq0$ and X is chosen from radicals CW'.

58. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material the at least one compound (a) wherein $p\neq0$ and Y is chosen from groups Z and the at least one complexing agent (b) wherein $p'=0$ and X is chosen from groups Z'.

59. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material the at least one compound (a) wherein $p\neq0$ and Y is chosen from radicals BW and the at least one complexing agent (b) wherein $p'=0$ and X is chosen from groups Z'.

60. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material the at least one compound (a) wherein $p\neq0$ and Y is chosen from groups Z and the at least one complexing agent (b) wherein $p'=0$ and X is chosen from radicals CW'.

61. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin materials the at least one compound (a) wherein

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p≠0 and Y is chosen from radicals BW and the at least one complexing agent (b) wherein p'=0 and X is chosen from radicals CW'.
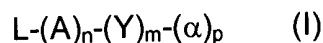
62. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material the at least one compound (a) wherein p≠0 and Y is chosen from groups Z and the at least one complexing agent (b) wherein p'≠0 and X is chosen from groups Z'.

63. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material the at least one compound (a) wherein p≠0 and Y is chosen from radicals BW and the at least one complexing agent (b) wherein p'≠0 and X is chosen from groups Z'.

64. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material the at least one compound (a) wherein p≠0 and Y is chosen from groups Z and the at least one complexing agent (b) wherein p'≠0 and X is chosen from radicals CW'.

65. The process for treating a keratin material according to Claim 16, comprising simultaneously depositing onto the keratin material the at least one compound (a) in which p≠0 and Y is chosen from radicals BW and the at least one compound (b) wherein p'≠0 and X is chosen from radicals CW'.

66. The process for treating a keratin material according to Claim 16, further comprising at least one subsequent step wherein the at least one compound (a) and/or the at least one complexing agent (b) is applied to the keratin material.

67. A multicompartment kit for treating a keratin material, comprising:

- a first compartment comprising at least one compound (a) chosen from compounds of formula (I):

$$L\text{-}(A)_n\text{-}(Y)_m\text{-}(\alpha)_p \qquad (I)$$

- m is a number ranging from 0 to 100;

- n is equal to 0 or 1;

- p is a number ranging from 0 to 100;

- α is chosen from anchoring groups allowing covalent attachment to a keratin material;

- L is chosen from residues having complexing activity relative to the at least one complexing agent (b), provided that L is not biotin;

- A is chosen from linear and branched, saturated and unsaturated divalent radicals comprising from 1 to 100 carbon atoms, optionally interrupted with at least one hetero atom and optionally substituted with at least one group chosen from hydroxyl, amino, halogen, aryl, phosphate, phosphonate, sulphate, sulphonate, carboxyl, alkoxycarbonyl and alkoxy groups;

- Y is chosen from groups Z, wherein Z is chosen from carboxyl, mercaptan, alkoxycarbonyl, amino, ammonio, phosphite, phosphate, phosphonate, sulphate sulphite, and sulphonate and radicals BW, wherein W is chosen from residues with cosmetic activity and B is chosen from species for fixing the residue W to L or to A;

- B is chosen from amine, imine, amide, ester, disulphide, thioester, urethane, urea, ether, thioether, azo, methine and epoxy groups, aromatic and heterocyclic residues and dialkylpolysiloxane residues; and

- W is derived from at least one of UV-screening molecules, hydrating and emollient molecules, conditioners, antistatic agents, antiperspirants, fragrancing materials, reducing molecules, oxidizing molecules, coloring molecules, antimicrobial agents,

antidandruff agents, mineral and organic particulates onto which are optionally adsorbed at least one polymer, and anionic and nonionic, amphoteric and cationic film-forming agents onto which are optionally adsorbed organic and/or mineral particles; and

- a second comparment comprising at least one complexing agent (b) chosen from compounds of formula (II):

$$D(A')_{n'}(X)_{m'}(\alpha')_{p'} \qquad (II)$$
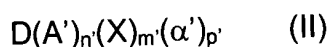
wherein:

- α' is chosen from anchoring groups allowing covalent attachment to a keratin material;

- X is chosen from Z' and radicals CW';

- Z' is chosen from carboxyl, mercaptan, alkoxycarbonyl, amino, ammonio, phosphite, phosphate, phosphonate, sulphate sulphite, and sulphonate radicals;

- m' is a number ranging from 0 to 100;

- n' is equal to 0 or 1;

- p' is a number ranging from 0 to 100;

- A' is chosen from linear and branched, saturated and unsaturated divalent radicals comprising from 1 to 100 carbon atoms, optionally interrupted with at least one hetero atom and optionally substituted with at least one group chosen from hydroxyl, amino, halogen, aryl, phosphate, phosphonate, sulphate, sulphonate, carboxyl, alkoxycarbonyl and alkoxy groups;

- C is chosen from moieties for attaching the residue W to the active complexing component D; and

• W' is derived from at least one of UV-screening molecules, hydrating and emollient molecules, conditioners, antistatic agents, antiperspirants, fragrancing materials, reducing molecules, oxidizing molecules, coloring molecules, antimicrobial agents, antidandruff agents, mineral and organic particulates onto which are optionally adsorbed at least one polymer, and anionic and nonionic, amphoteric and cationic film-forming agents onto which are optionally adsorbed organic and/or mineral particles; and

• D is such that the combination $D(A')_{n'}(X)_{m'}(\alpha')_{p'}$ can form with the at least one compound (a) a complex whose dissociation constant is less than 0.1 at a temperature of 25°C.

68. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein $p=0$ and Y is chosen from groups Z and, in the second compartment, the at least one complexing agent (b) wherein $p'=0$ and X is chosen from groups Z'.

69. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein $p=0$ and Y is chosen from groups BW and, in the second compartment, the at least one complexing agent (b) wherein $p'=0$ and X is chosen from groups Z'.

70. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein $p=0$ and Y is chosen from groups Z and, in the second compartment, the at least one complexing agent (b) whereom $p'=0$ and X is chosen grom radicals CW'.

71. The kit for treating a keratin material according to Claim 67, comprising, in a first compartment, the at least one compound (a) wherein $p=0$ and Y is chosen from groups BW

and, in the second compartment, the at least one complexing agent (b) wherein p'=0 and X is chosen from radicals CW'.

72. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein p=0 and Y is chosen from groups Z and, in the second compartment, the at least one complexing agent (b) wherein p'≠0 and X is chosen from groups Z'.

73. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein p=0 and Y is chosen from groups BW and, in the second compartment, the at least one complexing agent (b) wherein p'≠0 and X is chosen from groups Z'.

74. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein p=0 and Y is chosen from groups Z and, in the second compartment, the at least one complexing agent (b) wherein p'≠0 and X is chosen from radicals CW'.

75. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein p=0 and Y is chosen from groups BW and, in the second compartment, the at least one complexing agent (b) wherein p'≠0 and X is chosen from radicals CW'.

76. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein p≠0 and Y is chosen from groups Z and, in the second compartment, the at least one complexing agent (b) wherein p'=0 and X is chosen from groups Z'.

77. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein p≠0 and Y is chosen from groups

BW and, in the second compartment, the at least one complexing agent (b) wherein p'=0 and X is chosen from groups Z'.

78. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein p≠0 and Y is chosen from groups Z and, in the second compartment, the at least one complexing agent (b) wherein p'=0 and X is chosen from radicals CW'.

79. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein p≠0 and Y is chosen from groups BW and, in the second compartment, the at least one complexing agent (b) wherein p'=0 and X is chosen from radicals CW'.

80. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein p≠0 and Y is chosen from groups Z and, in the second compartment, the at least one complexing agent (b) wherein p'≠0 and X is chosen from groups Z'.

81. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein p≠0 and Y is chosen from radicals BW and, in the second compartment, the at least one complexing agent (b) wherein p'≠0 and X is chosen from groups Z'.
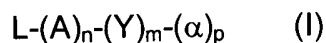
82. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein p≠0 and Y is chosen from groups Z and, in the second compartment, the at least one complexing agent (b) wherein p'≠0 and X is chosen from radicals CW'.

83. The kit for treating a keratin material according to Claim 67, comprising, in the first compartment, the at least one compound (a) wherein p≠0 and Y is chosen from radicals BW and, in the second compartment, the at least one complexing agent (b) wherein p'≠0 and X is chosen from radicals CW'.

84. A process for treating a keratin material, comprising:

- applying to a keratin material at least one cosmetic treatment agent chosen from reducing agents, oxidizing agents for permanently reshaping the hair, oxidation dyes, bleaching agents, shampoos, styling compositions;

- then applying, sequentially or simultaneously, to the keratin material a sufficient amount for treatment of at least one compound (a) and at least one complexing agent (b) as defined below,

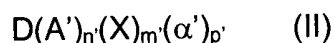wherein said at least one compound (a) is chosen from compounds of formula (I):

$$L\text{-}(A)_n\text{-}(Y)_m\text{-}(\alpha)_p \qquad (I)$$

- m is a number ranging from 0 to 100;

- n is equal to 0 or 1;

- p is a number ranging from 0 to 100;

- α is chosen from anchoring groups allowing covalent attachment to a keratin material;

- L is chosen from residues having complexing activity relative to the at least one complexing agent (b), provided that L is not biotin;

- A is chosen from linear and branched, saturated and unsaturated divalent radicals comprising from 1 to 100 carbon atoms, optionally interrupted with at least one hetero atom and optionally substituted with at least one group chosen from hydroxyl,

amino, halogen, aryl, phosphate, phosphonate, sulphate, sulphonate, carboxyl, alkoxycarbonyl and alkoxy groups;

- Y is chosen from groups Z, wherein Z is chosen from carboxyl, mercaptan, alkoxycarbonyl, amino, ammonio, phosphite, phosphate, phosphonate, sulphate sulphite, and sulphonate and radicals BW, wherein W is chosen from residues with cosmetic activity and B is chosen from species for fixing the residue W to L or to A;

- B is chosen from amine, imine, amide, ester, disulphide, thioester, urethane, urea, ether, thioether, azo, methine and epoxy groups, aromatic and heterocyclic residues and dialkylpolysiloxane residues; and

- W is derived from at least one of UV-screening molecules, hydrating and emollient molecules, conditioners, antistatic agents, antiperspirants, fragrancing materials, reducing molecules, oxidizing molecules, coloring molecules, antimicrobial agents, antidandruff agents, mineral and organic particulates onto which are optionally adsorbed at least one polymer, and anionic and nonionic, amphoteric and cationic film-forming agents onto which are optionally adsorbed organic and/or mineral particles; and

and wherein said at least one complexing agent (b) is chosen from compounds of formula (II):

$$D(A')_{n'}(X)_{m'}(\alpha')_{p'} \qquad (II)$$

wherein:

- α' is chosen from anchoring groups allowing covalent attachment to a keratin material;

- X is chosen from groups Z' and radicals CW';

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- Z' is chosen from carboxyl, mercaptan, alkoxycarbonyl, amino, ammonio, phosphite, phosphate, phosphonate, sulphate sulphite, and sulphonate radicals;

- m' is a number ranging from 0 to 100;

- n' is equal to 0 or 1;

- p' is a number ranging from 0 to 100;

- A' is chosen from linear and branched, saturated and unsaturated divalent radicals comprising from 1 to 100 carbon atoms, optionally interrupted with at least one hetero atom and optionally substituted with at least one group chosen from hydroxyl, amino, halogen, aryl, phosphate, phosphonate, sulphate, sulphonate, carboxyl, alkoxycarbonyl and alkoxy groups;

- W' is derived from at least one of UV-screening molecules, hydrating and emollient molecules, conditioners, antistatic agents, antiperspirants, fragrancing materials, reducing molecules, oxidizing molecules, coloring molecules, antimicrobial agents, antidandruff agents, mineral and organic particulates onto which are optionally adsorbed at least one polymer, and anionic and nonionic, amphoteric and cationic film-forming agents onto which are optionally adsorbed organic and/or mineral particles;

- C is chosen from moieties for attaching the residue W to the active complexing component D; and

- D is such that the combination $D(A')_{n'}(X)_{m'}(\alpha')_{p'}$ can form with the at least one compound (a) a complex whose dissociation constant is less than 0.1 at a temperature of 25°C.